

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Mike Duke <gmduke@oscar.TECLink.Net>
Subject: [747] 10/12 meter equipment
Message-ID: <Pine.SOL.3.91.960930202840.9414C-100000@oscar.teclink.net>

Are there any sorces for 10 or 12 meter cw xcvs or xmtrs in the 2 - 5
watt range?
73, WB5ADC

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: BOB KELLOGG <ae4ic@nr.infi.net>
Subject: [755] 40-9er Contest rules -Correction
Message-ID: <199610010308.XAA08801@mh004.infi.net>

Why, Oh Why, do I have to deal with so many technical types that insist on
accuracy with numbers???!!!

The 40-9er contest will be on *weekday evenings* only. Paul, WB8JZL points
out that 0100Z - 0300Z is in the evening after the new day has started.
Therefore, the contest will be November 12 through the 16th - Monday evening
through Friday evening, not the 11th - 15th as previously announced.

Thank you, Paul.

CUL,

Bob Kellogg, AE4IC
Prolably, but not nececelery. - Benny Hill

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: WJ4PRandy@aol.com
Subject: [742] 49er question
Message-ID: <960930185818_321185047@emout09.mail.aol.com>

Anybody know how to determine the "mesh"
of the trimmer cap, C2?
Thanks in advance,
Randy WJ4P

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996

From: Dale Anderson <dalea@artemis.fc.hp.com>
Subject: [743] 80 Meters & QRM...
Message-ID: <9609302329.AA01332@artemis.fc.hp.com>

With the 80 Meter EMPS soon to start, I've been paying more attention to 80m. I am frustrated with the amount of noise I'm getting from the powerlines that run behind my house. These things are 3 Phases at 60Kv on 50' towers. From our deck, 300' away, I can hear the corona crackeling. A closer listen shows it originating everywhere along the lines, but mostly at the towers. To give you some idea of what these lines must be carrying, I noticed that on heavy power usage days, I could hear the towers themselves vibrating with a loud "HrummHrummHrummHrumm..." sound.

My noise level on parts of 80m is around 10 over 9 on the worst days. Pretty annoying. Luckally, it's MUCH better at night when power usage drops off. The corona is even less audible then (can't hear it from the house). Apparently, the corona is more directly related to the current than the voltage on the lines. I admit, HV isn't my strong suit so I'm not sure why this would be the case. Luckally, my rig has GREAT filters, so I've had good luck on 80. But to hear the REALLY weak ones at my QTH, I need to get the local noise level down.

I doubt that the utility company can/will do anything about the electrical noise caused by these. It's not just ONE insulator or transformer causing the noise. I intend to put up a full-wave 80m loop this week in hopes of it being a quieter antenna than my dipole. I am also considering trying one of those "Antenna Noise Cancellers". Can anyone share their experience with these? Is the loop likely to be quieter? From what I've read, it should be.

Please respond directly to me so as to not add to the noise (pun intended) on QRP-L.

Tnx ex 72,
de Dale, KB0VCC
Fort Collins, CO
QRP-L#91 / CQC#251

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Mike Duke <gmduke@oscar.TECLink.Net>
Subject: [746] BOAT ANCHOR LIST
Message-ID: <Pine.SOL.3.91.960930202532.9414B-100000@oscar.teclink.net>

I recently saw a reference to a "boat anchor" list. Would someone please email me the subscription info?
73, WB5ADC, Jackson, MS

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: kd1jv@juno.com (STEVEN WEBER)
Subject: [729] DDS VFO with AD7008
Message-ID: <19960908.184332.5471.2.KD1JV@juno.com>

Hi gang,

Just got on this service, might be many like me who just found out about it thanks to aa0xi's review of the "Atomic Keyer" in "73" this month.

All you hardcore home-brewers out there might be interested in a project I have available. It's a AD 7008 based digital VFO. Tunes DC to 23 Mhz in 1 Hz(min) steps, is rotary tuned, LCD display, 20 eeprom memories, RIT, (and XIT for split band operation) memo memory, programmable LO offset for making direct reading receivers. Can also be calibrated if you have accurate freq counter available. Everything you need for freq control of a QRP transceiver. It's built on a 4" L, 2.5" W 3/4" D board, encoder mounts off board. Spurs? -50 dBc min wide band, -60, -70 typical narrow band.

Think about it, no more drit, chirp and accurate freq display.....

Couple of LOWfer guys are using them to run 1350 Meter beacons and set distance records with CCW operation.

This version was developed from the "DDS Dream VFO" which appeared in the Oct, '95 issue of 73. A stripped down version will be described in the latest issue of the NE QRP newsletter, later this month.

I have kits available, they aren't exactly cheap, but well worth it (I think).

If you want to know more, drop me a message.

If this kind of posting isn't acceptable, give me heck and wound't do it again!!!!

Currently working on a I2C bus controlled PLL chip good from 50 Mhz to 1.3 Ghz in 50 KHz steps. I'm looking to make a module that will tune 50 Mhz to 380 Mhz using three inexpensive VCO's from MCL. Right now have it tuning 150 Mhz to 300 Mhz using VCO happened to have in junk box. One of the first applications will be to convert a cordless phone base unit to the 6 meter band, for QRP FM work! Any intrest in a VHF/UHF signal source with rotarty tuning and LCD?

de KD1JV

KD1JV@juno.com

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "David Kreinberg" <kreinbd@ccgate.dl.nec.com>
Subject: [719] EMPS
Message-ID: <9608308441.AA844103837@smtpgw.ccgate.dl.nec.com>

Gang:

October 1 is almost here, and time for the 80m Prop.
Study as proposed by Chuck.

Where will many of you be hanging out? I think Chuck suggested the color burst frequency of 3.579, or so. I often hear the most activity on the high side of 3.6 (around 3.680 to 3.70). Do many Generals, Advanced, and Extras go up here because of more activity in the Novice area?

Please let me know where many of you will be prowling. I'm looking forward to getting back on 80m after so many years of neglecting that band.

73 de Dave AC5GY

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Tom Bowman <tbowman@nbn.net>
Subject: [751] FS: two HW-7s
Message-ID: <2.2.32.19961001022940.006901a0@nbn.net>

I'd like to sell two Heath HW-7s as a pair, that is, I don't want to split them.

About the first: I've had this rig for at least five years. I modified the receiver in this one, adding the standard mod using the SBL-1 doubly-balanced mixer plus an RIT control. I get about one watt out on 40 meters and the receiver works well there. I never got around to trouble shooting the rig on 20 and 15 meters and it does not xmt on either of these bands. I will include the schematics for the modifications I've made.

The second HW-7 is completely unmodified - stock Heathkit - and a quick check of the rig shows the rcvr works like any HW-7 - plenty of foreign broadcasters mixed with CW on 40 - but the xmtr is intermittent. I never worked on this one.

I feel \$70 for the pair is fair plus you pay insurance and shipping. Or I'll swap the pair for an unassembled GM-30.

Thanks for the bandwidth,
Tom

Tom Bowman, WA3REY, Mount Gretna, PA 17064 tbowman@nbn.net

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: ji3m@scubed.com (James R. Duffey)
Subject: [718] Good Reference Books
Message-ID: <v02130501ae75874ce81e@[192.31.66.229]>

n4so@juno.com on Sun, 29 Sep 1996 22:22:54 EDT, sent;
"This is a request for your list of favorite Reference Books related to
Low -Power"

Well I would like to recommend three books that are somewhat out of the mainstream of amateur radio, but are none the less very useful. They are not specific to low power operation, but are useful to all aspects of Ham Radio. All three are college textbooks, but are readily accessible to anyone who faintly remembers their high school algebra and trig. They certainly require no more knowledge of trig and algebra than is required to pass an Amateur General Exam.

Antennas by John Kraus

Kraus is W8JK of the antenna of the same name fame. He also invented the helix and corner reflector. Arguably he has contributed as much to antennas as anybody in the history of radio. There are several versions of this book out; I used my father's copy of the first edition when I was in High School 30 years ago and it was old then. I think that there is at least one and

maybe two revisions out since then. Expensive new, this should be available in any large library and will certainly be available in any engineering library worth its salt. I always look for a copy when I go into used book stores. There are particularly good discussions on the helix antenna and various forms of folded dipoles. I used it to calculate patterns of phased verticals as a high school science fair project.

Radio Engineering by Terman

This book has gone through many editions since first released in the 40s. I don't think it is in print any longer. Very good discussions on all aspects of radio. Much of the discussion on tube circuits is of limited interest, but the discussion on FM is among the best anywhere. No one should operate a handie talkie without reading the FM discussion in this book. This book should also be available in good engineering libraries and is occasionally seen in used book stores.

The Art of Electronics by Horowitz and Hill

This is a modern text on electronics which is hard to beat. It is designed for people like experimental physicists who need a broad knowledge of electronics, but who are not electrical engineers. It is widely available; most any large city library should have it and I have seen it in the chain book stores such as Book Star and Borders. It is currently widely used as a college text, so many college bookstores will have it. It is particularly good for choosing devices as they have tables which give pertinent properties of various devices and recommendations for choosing them for particular applications. The discussions on micropower operation are very good. It is an all around good reference book, second only to the handbook for usefulness.

If you are in a good technical library you may wish to take a look at several interesting journals among them; the IEEE Transactions on Antennas and Propagation, IRE Proceedings, (they devoted an entire issue to SSB in the 50s which is still good reading), and The RCA Review which in the 30s had excellent articles about long wire antennas, Beveridge antennas, Rhombics, verticals and ground planes.

If you can wangle a free subscription to RF Design, it is worth it. You will find an occasional article that is of interest to amateur radio. It is a trade periodical with audited circulation. Gary Breed, a famous QRPer edited it for many years.

I guess that is more than three. Good reading. - Duffey KK6MC/5

James R Duffey KK6MC/5 DM65
30 Casa Loma Road
Cedar Crest, NM 87008

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: mitsu@mars.dtinet.or.jp
Subject: [707] HAM RADIO SHOP NEAR DETROIT
Message-ID: <Chameleon.844032430.mitsu@win95>

HI

Once or twice in a year I visit DETROIT these years.
I would like find HAM shop near LIVONIA or PLYMTH.

Could someone tell me where is it ?

de JR3QOV

Name: Y.Mitsunaga
E-mail: mitsu@mars.dtinet.or.jp
JR3QOV

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "Douglas L. Datwyler" <datwyler@mail.aros.net>
Subject: [756] JOTA - Jamboree on the Air
Message-ID: <32508BF3.1D72@mail.aros.net>

Is anyone doing air time during Jamboree-on-the-Air? Oct 19, 1996 0000
to 2359 local.

Doug WR7O

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Doug Hendricks <ki6ds@telis.org>
Subject: [703] KI6DS Resignation From ARCI Board of Directors
Message-ID: <324F4200.7C24@telis.org>

Lets try this again. I apologize for the truncated message that went out, I
don't know what happened.

I have resigned as a member of the Board of Directors of QRP ARCI effective

yesterday. It is not a decision that was reached in haste. I have thought long and hard about the time that I have available, and something had to give. Jim and I started NorCal less than 4 years ago, and I want to make sure that it continues as a viable QRP entity. I have found that I do not have the time to devote to ARCI with the responsibilities that I have.

NorCal is growing by leaps and bounds, I teach full time, and I have again become involved in coaching girl's basketball, but not as a head coach.

I am proud to say that one of my former players is now the head coach, and she asked me to assist her, and out of loyalty, I must accept. (Plus I know that I will enjoy working with her.)

I will remain a member of QRP ARCI, and will support the club in every way possible. NorCal will continue to support ARCI as it always has. My resignation does not change anything about the NorCal sponsored ARCI Dayton Building and Design Contest. Remember that entries are due to me by Nov. 1, sooner if possible.

In closing let me say that I wish the Board of Directors good luck with their very difficult job. Thank you to all of the members who voted for me in the last election. I am sorry that I am unable to fulfill my term, but hope that you will understand. Thank you, from another QRP ARCI member.
Doug, KI6DS

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "Douglas L. Datwyler" <datwyler@mail.aros.net>
Subject: [757] KN4BS, Mick Gingell
Message-ID: <32508C86.3556@mail.aros.net>

Anyone know the e-mail for a Michael J. Gingell? I corresponded with him some years back about a mutually interesting HAM topic, and would like to contact him again.

TNX

Doug WR70

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: PDouglas12@aol.com
Subject: [714] Last call for Pacificon/QRP badges
Message-ID: <960930100137_533572418@emout16.mail.aol.com>

Gang,

Remember when Ed McMahon used to say to Carnak (Johnny Carson) that he holds the last envelope and the audience would cheer? Well this is the second to

last Pacificon badge message (cheering heard).

I have decided to close out the list for Pacificon badges on Wednesday.

There haven't been more than one or two requests in the last two weeks, so I assume this means everyone who wants one has already sent their request. The list is about 35 people. I will post the final list tomorrow (Tuesday night) and prepare the badges on Wednesday. They will go by overnight on Thursday to Doug Hendricks. So, this is last call. If you will be at Pacificon, particularly at the QRP symposium, and want an ID badge (free) with your name and call please email me promptly at Pdouglas12@aol.com .

Sorry I won't see you there in California, but I will be up at Boxboro Friday and Saturday, so I hope to see some familiar faces in New England.

72,

Preston WJ2V

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Byron8LCZ@aol.com
Subject: [713] Last CW Mars msg Today
Message-ID: <960930095151_533567329@emout12.mail.aol.com>

Hi Gang,

I just received this message, this morning, via the DX Reflector:

Subj: Navy MARS final CW Broadcast
Date: 96-09-30 03:49:28 EDT
From: ko7v@juno.com (michael g cizek)
Sender: owner-dx@ve7tcp.ampr.org
Reply-to: ko7v@juno.com (michael g cizek)
To: dx@ve7tcp.ampr.org

From: Chief Navy-Marine Corps MARS
To : All Radio Amateurs
Subj: COMMEMORATIVE FINAL CW BROADCAST

Effective 1 October 1996 the CW mode of communications will be terminated on all DOD MARS circuits. As a tribute to CW there will be a special joint MARS CW broadcast on Monday, 30 September 1996. As with Armed Forces Day, a joint commemorative certificate signed by all three MARS Chiefs will be awarded to any amateur radio operators who successfully copy this final CW broadcast. Navy-Marine Corps MARS headquarters station, NAV, will transmit on the following schedule. Each transmission will begin with a ten minute call up sent at 15 WPM,

followed by the broadcast message sent at 25, 20, and 15 WPM:

1600Z, 1800Z 30 SEP AND 0000Z 1 OCT on 4,018 kHz
1640Z, 1840Z 30 SEP AND 0040Z 1 OCT on 10,258 kHz
1520z, 1920Z 30 SEP AND 0120Z 1 OCT on 14,393 kHz

To receive the certificate, send your copy of the CW message to:

Chief NAVMARCORMARS
4401 Massachusetts Ave NW
Washington, DC 20394-5460
Attn: Final CW Message

NNNN

Its too bad they didnt give us more time to get the word out.

72, Byron WA8LCZ

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: sponder@apollo.millenniuminc.com (Stephen H. Ponder)
Subject: [715] MFJ Multiple DC Power Outlets
Message-ID: <199609301415.JAA05468@millenniuminc.com>

Greetings, all! I am a newcomer to the world of QRP and to this mailing list. I was wondering which of the MFJ multiple DC power outlets one would recommend for use in powering QRP rigs and peripherals. I have a 13.8 VDC power supply, but it has only one external connector.

Thanks for your help!

Steve Ponder, N5WBI

```
*****
* N5WBI                      QTH:      29.55N 95.12W Grid EL29kn  *
* Stephen H. Ponder          Old Call: KA5UOR (1984-1991)      *
* P. O. Box 890442           Rigs:      HW-8, HR-2600, HTX-202  *
* Houston, TX 77289-0442     Member:    ARRL, 10-X (# 65011)   *
* USA                        QRP-L (#720)                      *
*                            Email:      sponder@millenniuminc.com *
*****
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From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996

From: "Frank G3YCC" <g3ycc@enterprise.net>
Subject: [725] More for you!
Message-ID: <199609301725.SAA25853@mail.enterprise.net>

There's more info for you fellow QRPers on my web pages, antennas, links etc. Check it out!

You lucky people!

Now, how about something from YOU, say a description of something built, maybe a picture?

There's yet another picture of a 49er on the site.

Come on guys, make my day!

--

Frank G3YCC (G QRP 042)

QRP Web Page:

<http://homepages.enterprise.net/g3ycc/>

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "Dick Witzke" <ohrqrp@netonecom.net>
Subject: [717] OHR Web Page
Message-ID: <199609301501.LAA28240@netone.netonecom.net>

Good morning all,

The new Oak Hills Research web page is finally up and running. The address is <<http://www.ohr.com>>. All kits currently available are shown with descriptions, photos, prices and shipping information. The new e-mail address <qrp@ohr.com> shown on the page is still not operational. You may use our current e-mail address which is <ohrqrp@netonecom.net>.

73,

Dick Witzke, KE8KL

Oak Hills Research

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "Dick Witzke" <ohrqrp@netonecom.net>
Subject: [744] OHR Web Page E-mail Address
Message-ID: <199610010007.UAA25134@netone.netonecom.net>

Gang,

The e-mail address <qrp@ohr.com> on our web page is now working correctly. You may use either <ohrqrp@netonecom.net> or <qrp@ohr.com> to contact us.

73,

Dick

OHR

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "Bob Tellefsen-CNSE97" <Bob_Tellefsen-CNSE97@email.mot.com>
Subject: [732] QRP++
Message-ID: <M1079412.004.k7203.1.960930185136Z.CC-MAIL*/OU=LMPCC10/OU=ILBE/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

I have added a very narrow audio filter to the audio section of my QRP++. Works extremely well, but naturally has some insertion loss. This is at the start of the audio chain, so I would like to insert a low-noise audio stage to make up the loss yet not degrade the noise figure.

Can anyone suggest a device or circuit that would provide perhaps 10dB gain at low noise? Would need to be single ended for use off the existing 12v supply.

Thanks and 72, Bob N6WG

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [712] Say no to NetNews
Message-ID: <Pine.3.89.9609300743.B5382-01000000@w3eax.umd.edu>

A brief message to explain why it should NOT be a newsgroup:

- 1) Newsgroups get spammed continually
- 2) Many subscribers to QRP-L (Jim, WA6GER, for instance) do so through Juno. They would be immediately cut off.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: QLF%mini@magic.itg.ti.com
Subject: [711] SIERRA, (Continued)
Message-ID: <9609301227.AA16175@itg.ti.com>

From: Brad Bradfield QLF

Subj: SIERRA, (Continued)

Good morning QRPers,

Well, the Sierra is coming along nicely. With two small exceptions, the board mounted components are all installed.

Has anyone changed the value of C41 to raise the sidetone frequency up nearer the "more common" 700 HZ or so? If so, what value capacitor is required? Please e-mail me direct if you've done this.

72's es 73's,

Brad, WB0CGH

Brad Bradfield, PE

Electrical Design Engineer

(H) 817-321-2960

Texas Instruments, Inc.

(W) 214-462-6230

Real men talk with their fingers!

QLF@MSG.TI.COM

WB0CGH@W05H.#DFW.TX.USA.NA

ARRL Life Member QRP-L #377 SMIRK #4906 IEEE(M) ARS #72

Collector of wireless and landline Morse keys and accessories.

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996

From: "Bob Tellefsen-CNSE97" <Bob_Tellefsen-CNSE97@email.mot.com>

Subject: [733] SSB power set for QRP

Message-ID: <M1079413.005.k7204.1.960930185137Z.CC-MAIL*/OU=LMPCC10/OU=ILBE/

PRMD=MOT/ADMD=MOT/C=US/@MHS>

As a brass pounder, I don't work ssb myself, although my station can. I'd like to know how you ssb ops out there set power so that you meet the QRP requirement.

Any info gratefully received.

72, Bob N6WG

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996

From: Stew Whitehouse <76443.501@CompuServe.COM>

Subject: [721] St Louis Vertical

Message-ID: <960930155559_76443.501_GHN111-1@CompuServe.COM>

Hi folks,

I Received my copy of QRPp Friday and knew I had to build the St Louis Vertical! First place I called Saturday morning had SD-20 fishing pole in stock. I'll let you know how it works as soon as the next coat of polyurathane dries on the dowel.

A 50' roll of twin-lead (RS 15-1153) is perfect for the coil, without any splices, and two 40' rolls (RS 15-004) make up the radials and vertical radiator without much waste.

Because of the soil (sand) here in Florida I made the "spike" about 18" long. I made it with a 1/4" aluminum rod that used to be a decoupling stub on a 2 meter antenna. These rods fell off after being up about 5 months. (aluminum, stainless steel nuts, and salt air don't mix) I don't know what the alloy is, but it's not soft aluminum and should do this job nicely.

I was concerned about the fine, plastic threads on the bottom of the pole getting fouled with sand, so I put two pan head screws (spaced at 180 degrees) into the wooden dowel. these will support the pole and leave about an inch of the dowel protruding from the bottom. A better solution my be to find a cap with matching threads and cut out the end. Then the treaded ring could be screwed on to protect the threads while the pole is in use in the antenna mode.

Now to find a small tackle box to carry the rig and accessories and when I walk down the beach, nobody will have a clue as to what I'm really up to!

72/73 Stew KE4YH
Dunedin, Florida

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: ukii@megsinet.net (ukii)
Subject: [754] Ten Tec info?
Message-ID: <01BBAF1A.0F0336E0@dial114.megsinet.net>

Hello Gang...

A friend has been trying to call Ten Tec for the past week and never got an answer. Anyone know if the people are there,or maybe on vacation??
He tried 1800-833-7373 for fax,and 1-423-453-7172 for voice line.

He tried a few times each day and never had anyone pick up the phone.
Any help for him? I think he is looking into the 2mtr kit (comments
WELCOME!) He is NEW at kit building, and since I only built
the 49er, I can't help him. I did mention that it might be a bit too
much for a first kit though...

Thanks again...

Best 73 de John
N9UKX

Six pack of Jolt still available for first contact on my 49er!
(no luck yet)

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Andy Stafford <100412.3337@CompuServe.COM>
Subject: [706] TenTec E-Mail Address - THANKS
Message-ID: <960930084359_100412.3337_BHG130-2@CompuServe.COM>

To all those who sent replies to my request for TenTec's E-mail address, THANKS
GUYS!! Much appreciated.

I shall be in contact with them re repairing the Argonaut.

72/73

Andy G4VPM/8Q7AS

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Scott Bauer <ke3nv@erols.com>
Subject: [753] test
Message-ID: <199610010256.WAA19712@smtp2.erols.com>

2nd try at posting. test. beep beep di da di da di da

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Tim Pettibone <tpettibo@NMSU.Edu>
Subject: [723] The FOX is coming!
Message-ID: <199609301641.KAA19747@NMSU.Edu>

Alert! The first FOX will be found on or around (usually up) from 7.037 MHz at 0100-0300Z on October 3. Please note that October 3 Z is usually October 2 local USA. So if you miss me and try to complain that I didn't show on October 3 local - tough. The exchange is to be RST, State/P/C, Name, and QRP-L Number or Power. My QRP-L number may confuse you so be careful. My GAP Titan Vertical is acting strange so I may have to switch in the assymetric zepp configuration. (It's assymetric because the power company trimmed trees and broke one end. So I reattached a longer piece of fishline and put it back up.) The rig will be the QRP+ unless power line noise is so bad I have to put the TS140s on line with its noise blanker.

I'm looking forward to it. I will QSL 100%. And, Chuck, I used to say that only my mother called me Timmy. Now you have that honor as well!

Tim AB50U
QRP-L # 73

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: WJ4PRandy@aol.com
Subject: [741] Toroid Formula
Message-ID: <960930185806_321184834@emout01.mail.aol.com>

In NA5N's book he gives a formula to
derive the number of turns needed on a
toroid to produce a desired value of inductance.

Is there a typo there or am I not doing it correctly.
I can't get it to produce the correct number of turns.

Wrrruuuuhhhhhh!!???

73, Randy WJ4P

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Alex Mendelsohn <alexm@pennwell.com>
Subject: [752] Tube gear
Message-ID: <061B112E01E40200@smtp.pennwell.com>

It sure is interesting to see the discussion of the tube-type gear for QRP here on QRP-L. Gee, I remember the Pop'tronics and Radio-Electronics

articles of the late Fifties when I was a kid. I vaguely recall how I built a 6AQ5 rig on a clear plastic box of some sort. In those days, I had no idea about how to couple power into my 12-foot high dipole, and didn't work much with the 6AQ5 rig! Snagged a few locals though.

I did manage to QSO with Ivor Stafford, VK3XB on the 40 meter Novice band however (and still cherish the pasteboard). I'm certain some of the older members of QRP-L remember when Ivor used to listen for Novices on 40 meters. Herb Brier (W9EGQ?) would list the callsigns of the Stateside Novices that Ivor worked. What a thrill to QSO him with my 6AG7-6L6 Heathkit AT-1 and pipsqueak antenna (I wonder if anyone on the list here has an AT-1 for sale or swap? I have a really nice DX-35 to trade!)

Much more recently, I put together a 6L6 Colpitts oscillator for use on the Antique Wireless Association's annual Old Time Radio contest. Trying to keep the replica of a 1939 rig reasonably authentic, I used a Type 80 rectifier and a VR-150 gaseous regulator tube and a glass 6L6. It runs about 8 watts input and perhaps 5 or 6 watts out. My only concession to modernity was the use of a pi-net in the plug-in coil plate circuit and the use of a TV-style power transformer donated to me by N2FNI.

What a ball I've had with this xtal-controlled rig on 80 and 40. During the AWA tests, I routinely work into the Caribbean on 80 meters, and raise stations all over the country, including 6-land, from my QTH here in southern Maine. It's fun to lightly grasp the plug-in coil at the end of a QSO, and "wobulate" the signal a bit when signing off to give the other guy a kick and let him know it's really not a ricebox rig he just worked. ;-)

Perhaps even more amazing is the fact that most stations participating in the AWA tests use old receivers from the 20s and 30s. I used a 1938 Hammarlund HQ-120 until I decided to take the bull by the horns and see what a regenerative set would do. I finally built one up after locating a Bud plug-in coil set (in the original box) under a table at a hamfair. My receiver uses a Type 27 tube and a Type 24 (one is a regenerative detector and the other is a single stage of audio). It's built on a wooden board (of course) and it works just fine! It's very touchy to adjust, but is amazingly sensitive with lotsa audio into the old ear-flatteners (Trimm Professional headphones). I actually copied UA2BD on 80 CW with it one night using a hank of wire on the floor of the shack in the basement!

If anyone would like a schematic of either rig, I'd be happy to supply copies if you'll send along an SASE to make my already harried and busy life easier. CBA is okay.

Vy 73, Alex in Kennebunk, Maine, QRP-L #687 .-.-.

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: David Adams <dave@flowserver.stem.com>
Subject: [720] Unbuilt Heath Qrp Wattmeter
Message-ID: <9609301549.AA02011@flowserver.stem.com>

Greetings! Well, I got home on friday and told my wife that I was buying the HM-9 kit, and she promptly told me that she had just spent my radio cash stash and that she intends to replace it but....

Regardless, I thought I'd mention it on the list and see if anyone wants it before I tell the gentleman to put it back on packet for general sale. If you are interested (he wants \$100 shipped), I will pass on the info and you can call him.

73 de dave, n9uxu---

David J Adams N9UXU QRP-L #83
dave@flowserver.stem.com NorCal QRP #1442
(415) 813-5028 Flow Cytometry Specialist

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: tony@wilkes.ak.planet.co.nz (Tony Wilkes)
Subject: [705] What was that on OHR
Message-ID: <616@wilkes.ak.planet>

Well Chaps we're getting there (qrp) slowly.

Thanks to many replies, KC7NEV,N4S0,K6AEC,NQ7X,AA30N etc I now have an Auttek RF-1 on order, I also have a 40 9er on order (and an Altoids tin - I think that that must be like the QRP badge) but I missed the message about a bulk order to OHR, whoever is organising that would you please E-mail me direct, I would like to be "in" if possible.

Thanks
Tony

Tony Wilkes --- Whangaparaoa, North Island, New Zealand
ZL3SLH & G3SLH > QRP-L 717 - Royal Forest & Bird - Croquet

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "Thomas J. Whalen" <whalen@swcp.com>
Subject: [749] Re: 10/12 meter equipment
Message-ID: <Pine.SUN.3.91.960930194218.5520D-100000@kitsune.swcp.com>

On Mon, 30 Sep 1996, Mike Duke wrote:

> Are there any sorces for 10 or 12 meter cw xcvs or xmtrs in the 2 - 5
> watt range?
> 73, WB5ADC
>

Hi Mike, I have a schematic for a one transistor xmtr that will put out one watt on ten. Should be easy to put one on 12. Also have some 2 and 3 transistor circuits for xmtr's for any band 10-80 and maybe even 160. If interested I would be happy to send you plans. Im going to build the one trans 10 m rig myself and work the world as soon as the sunspots play ball!!!72 and cul Tom WB5QYT

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Jeffrey Herman <jherman@hawaii.edu>
Subject: [758] Re: 10/12 meter equipment
Message-ID: <Pine.GS0.3.93.960930170636.27215B-100000@uhunix5>

On Mon, 30 Sep 1996, Mike Duke wrote:

> Are there any sorces for 10 or 12 meter cw xcvs or xmtrs in the 2 - 5
> watt range?
> 73, WB5ADC

Look for the older xtal-style CB xcvs; those were supposedly easy to convert to 10 (and maybe 12, too). I'd be interested in how you'd key it for CW (pushing the mic button would give you a sore finger!).

7.3W,
Jeff KH2PZ / KH6

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "Paul R. Valko" <prvalko@Oakland.edu>
Subject: [761] Re: 40-9er Contest rules -Correction
Message-ID: <Pine.OSF.3.91.960930235055.5161A-100000@vela.acs.oakland.edu>

On Mon, 30 Sep 1996, BOB KELLOGG wrote:

> The 40-9er contest will be on *weekday evenings* only. Paul, WB8JZL points
whew! I *still* have the call, Bob! No need to slaughter it yet! (WB8ZJL)
> out that 0100Z - 0300Z is in the evening after the new day has started.

Bob, allow me to say that in English: The 49 contest will begin on
11/12/96 at 0100Z. That happens to be the evening of Monday November
11th here in the U.S. of A.

> Therefore, the contest will be November 12 through the 16th - Monday evening
> through Friday evening, not the 11th - 15th as previously announced.

Much better :-)

> Thank you, Paul.

No! Thank YOU Bob! This 49er event will be one of the outstanding
events of 1996 and a great way to kick off "the season."

73! =paul= wb8zjl <---- Watch this space!

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: talljazz@teleport.com (Dan Presley)
Subject: [724] Re: 7040 Digital interference
Message-ID: <v01530501ae74f6d35abf@[206.163.125.13]>

>>Is anyone hearing the rtty all around 7040 last night & today (9/27-28)? Is
>>there a contest, or is it more encroachment?

>>Dan N7CQR

>>

>>

>Hello Dan, and gang,

>

>Now, now, boys and girls, don't be coveteous of the Freqs. 7040 also happens
>to be a rtty frequency, and yes there is a rtty contest going on this
>week end. Why not join the fun. Rtty QRP is a blast. I use a QRP+ and Kam
>T.N.C. with HostmasterII software. To get on 20 meters I have to send a
>command to the T.N.C. to invert the XMT signal , due to using upper side
>band for 20 meters and up.

>

>I would be doing that contest myself, but I am doing a modification to the

>QRP+, for RF gain control. And while I'm at it, I will make an attempt at
>changing the RF power out pot, so as to be able to put a knob on it.
>This will enable me to not only adjust the RF gain, just by reaching over
>the top of the rig, but the power out too.
>
>Sssssso, lighten up guys, if you can't beat em , join em!!
>
>YH000000E, RTTY, (I'm an old rin tin tin fan)
>
>73 de AA1IK
>Ernie

Well, I'm not against other modes, and I realize we have no ownership of
the freq. What does bother me is no attempt to listen for a clear freq by
these guys-I heard 2 qsos trashed by them. It would be nice for the rtt
boys to be aware of the band plan, and try to work with it!
Dan N7CQR

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Steve Slavsky <sslavsky@CapAccess.org>
Subject: [726] Re: 80 Meter EMPS
Message-ID: <Pine.SUN.3.91-FP.960930131733.9181B-1000000@cap1.capaccess.org>

Are there any rules for the study (exchange, etc) or do we just work 'em
as we hear 'em? During the past month I have "rediscovered" 80 CW and
found it a friendly place. For those of us on the list who like to hang
out near 7110, which is virtually useless after sundown (BCI), the 3700
region is a lot quieter. I've tried 3579 and vicinity, but noted a lot
of RTTY/other computer stuff, at least here in Northern Virginia. Above
3600 seems to be a bit better. I did manage to check into the
KnightLites net last night and want to thank Paul, AA4XX for hanging in
there with all the QSB and QRN. You were 469, but I must have been a lot less.

I'll be mostly in the 3675 to 3725 area with occasional foreys lower
in freq. I hope to use this to get my speed up to where I am not totally
intimidated closer to the bottom of the bands.

I'll be the slow and steady straight key. I already have 5 states in
September on 80, but will set the counter back to 0 tonight.

73 & 72,

Steve, N4EUK

Reston, VA

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [728] Re: 80 Meter EMPS
Message-ID: <199609301838.SAA29308@chuck.dallas.sgi.com>

Steve et.al.,

EMPS has the same rules as TMPS. Just work as many as you can running QRP on Eighty Meters. All counters start at zero.

It's kinda like a race, it doesn't matter how many you have won before this one. We all start at the line and at 0000Z tonight/today/this evening/... we're off.

Sounds like I'm going to be lonely down as far as I am in freq.

Just below 3.560MHz I hear a rtty station almost all night (not that I'm up all night) and this weekend there was one parked on 3.579MHz (rtty that is) and lots of places in between due to the contest. Now you see why we run the foxhunt during the week. :-)

I have the NE4080 tuned for ~3.560 to 3.588 or so. Trial runs have shown that a) band is not occupied that much b) QRP levels are that good right now or c) I'm using a dummy load on transmit. Time will tell. :-)

Things that I like to check out data wise:

1. MPW per QSO
2. Plot of distance vs. time of day
3. Hours that band is open
4. Hopefully later some correlation between K and A values vs. conditions

If you really really like data then you need to visit

ftp://ftp.ngdc.noaa.gov/STP/SOLAR_DATA/SUNSPOT_NUMBERS/

there are two files

smoothed which has all the data since 1749, the first year of recording sunspot data

and

sunspot.predict predictions for the next few years

It looks like another two years of low numbers for us guys, so just relax and enjoy 30M->80M for a little while longer.

If you compare the data with what is in CQ's Amateur Radio Almanac you'll find that the way you average the daily numbers and the montly numbers gives you different results.

In fact, the same table from the Radio Almanac is at

ftp://ftp.ngdc.noaa.gov/STP/SOLAR_DATA/SUNSPOT_NUMBERS/monthly

Enjoy,

: Chuck Adams (K5FO CP-60) 49/49/50 adams@sgi.com
: EMPS QS0s=0 STATES(w/c)=0/0 DX=0

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Joel Malman <malman@BBN.COM>
Subject: [740] Re: 80 Meter EMPS
Message-ID: <199609302244.SAA64254@nss2.CC.Lehigh.EDU>

Group,

Re: EMPS, Chuck Adams asks..

> Sounds like I'm going to be lonely down as far as I am in freq.
>
> Just below 3.560MHz I hear a rtty station almost all night

Has anyone else heard the VA2MD beacon from Quebec City? I heard his beacon last night at 0125z, Oct 1 (Sep 30, EST). He is running 1 w on 3580 and was a 559 in Mass...

He sends a short message, waits about 10 seconds, and sends it again.

/joel wa1qvm

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: kd1jv@juno.com (STEVEN WEBER)
Subject: [750] RE: DDS VFO wid AD7008

Message-ID: <19960909.115859.5471.4.KD1JV@juno.com>

Wow, I had no idea....

All kinds of requests for more info, so here we go....

Got about 5 kits all ready to go. Cost is \$150.00 plus 5 for S+H. I send you everything you need but a box to build it into.

Big bucks, but I use some really expensive parts, the price one has to pay for state of the art, hi.

If a lot of you suddenly decide you just got to have one of these, please allow a couple of weeks for me to get more parts. (but I wound't know until you send a check, not going to invest my life savings on mere speculation !) Have 20 PC boards coming by the end of the week, and these have the longest lead time, so should be all set for a little while....

I'll give a complete run down here.

Model DDVFO-23

0 to 23,000,000 Mhz operation

1Hz, 10, 100, 1Khz, 10 Khz, 100 Khz, 1 Mhz tuning steps, selectable.

(note 0.1 Hz tuning steps available on special request)

Knob tuned with Grayhill encoder, 32 indented steps, 32 tuning steps per rev.

Any two adjacent tuning steps can be toggled back and forth using the PB built into the encoder. This PB is also used as an enter button when storing or recalling memories and to set the VFO into the "select tuning step mode"

20 Memories, programmable. Selected with rotary encoder, contents of memory may be viewed with out loading, so you can select the right one!

Freq stored in location 00 is used for default power up freq. (0 Hz until programmed)

A/B memo memory, one button operation. Short push toggels, long push stores

RIT, no tuning limits. When activated, T/R input selects Tx and Rx freq. XIT allows you to toggle back to your xmit freq to check if it is clear and adjust it if needed, without exiting RIT first. Makes split band operation easy.

Programmable offset freq. This freq is normally added to the base operating freq

when the T/R input is low. If the product $F_{base} + F$ offset exceeds 23 MHz, the offset is subtracted, keeping the output within the range of the VFO.

In a super het radio, the offset would be the center IF freq of the rig. I set it so my Rx and Tx freq match when I hear a 800 Hz side tone.

For DC radios, set the offset to 800 Hz or so and your Tx and Rx freq will match. Can also be used for FSK modulation.

Calibration. Due to variations in the reference clock, the absolute freq will be off some. It is a linear relationship, and can be expressed as Hz per Mhz. Typically the error is under 50 Hz per Mhz, (10 -20 Hz is more typical) but you can see that at 23 Mhz, this can be over 1 KHz!

Therefore, the four largest tuning steps, 1 Mhz, 100 KHz, 10 KHz and 1 KHz can be calibrated. This is done by tuning the VFO output to exactly 10 Mhz. All the freq steps are calculated from this point. Once calibrated, drift in the reference clock will be the biggest source of error.

Drift. Typical warm up drift is on the order of 5 Hz/ Mhz. Once the VFO has warmed up, you will see very little or no additional drift (provided the temp doesn't radically change).

Provisions for an external reference clock are built into the board. A jumper disables the internal reference. A 50 Mhz TCXO, set to precisely 50 Mhz will give the best over all freq and tuning accuracy.

The VFO is built on a 4" X 2.5" double sided PCB. The top layer is simply a ground plane and a jumper must be installed in several places to connect the top and bottom grounds together. The LCD plugs into the board with a SIP header. Except for three chip caps, used for by-passing, all the parts are through hole, making it easy to put together. Signal output via board mounted RCA jack. Hole pattern will also fit SMA type connectors.

DDVFO-DL

This is the stripped down version, it has no display or eeprom memories. It tunes DC to 22 Mhz. Knob tuned, 1 Hz to 100 KHz steps. LEDs indicate step size selected. It includes RIT and A/B memo. There are two signal output jacks mounted on board (RCA) one is a direct connection to the low pass filter, the other is buffered with a simple emitter follower to drive a counter.

This version is designed to be a GP signal generator when used with an external freq counter. It is also designed to replace an existing VFO,

to be used as an external VFO.

Tuning limits can be programmed, an LED will flash when you are at the end of the tuning range. A fixed freq offset can be programmed, to be either added or subtracted from the base freq when the T/R input is low. These features makes it possible to use the VFO as an external VFO in an existing rig (works great with my Ten-Tec Scout which has a freq counter display built in) Or, you can program the VFO to cover part of a ham band say 7.025 to 7.150 Mhz. You may not know where in that range you are operating, but you know for a fact its between those two limits!

Since there is no eeprom to store programmable data, the board has built in back up for the memory in the cpu. For short term back up a 0.1 Farad super cap is used. There is also provisions for external batteries, couple of "AAA" will do the trick.

This VFO is also built on a 4 X 2.5" board. Since there is no display it will fit in a small box. I use a small extruded alum box myself.

This version is a little less expensive at \$110.00 + 5 SH.

If there are any manufactures out there who might like to put something like this in their rig, give me a shout. Why reinvent the wheel?

Well, there's the long and short of it. Haven't had an unhappy customer yet, hope to keep it that way! One version or the other have already gone to Hams in eight different countries.

Hope to hear from you, Say NO to drift and chirp!
and TNX for letting me tell you all about these neat little gizmos. Best thing to happen to radios since the invention of the VFO!

72, 73, de

Steve Weber, KD1JV
Box 140
Gorham, HN 03581

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [731] Re: DDS VFO with AD7008
Message-ID: <199609301848.SAA29363@chuck.dallas.sgi.com>

Steven,

Your posting is acceptable, in fact, it is mandatory. :-)
There is always interest among this group for new toys.
Please come back and post to the group the number of kits that
you do have and the going rate.

Some will consider it an advertisement, but isn't the posting
of a rig for sale the same thing? We don't mind.

It's just the microwave ovens, R/C gear, and other things not
directly related that gets the net police up in arms.

Please, Steve, more details on availability.

Oh, and I think you'll be surprised by the number of orders
that you will get. Hope you got enough to go around. :-)

How about a group buy? :-) Kidding, just kidding.

dit dit

: Chuck Adams (K5FO CP-60) 49/49/50 adams@sgi.com
: EMPS QS0s=0 STATES(w/c)=0/0 DX=0

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Paul Harden <pharden@aoc.nrao.edu>
Subject: [735] Re: DDS VFO with AD7008
Message-ID: <199609301925.NAA23029@zia.aoc.nrao.edu>

Steve,

Many of us subscribe to this group to learn of new offerings,
new kits, new providers of parts, etc. Occassional posting of
this nature is acceptable, and welcomed by the homebrewers on
the group (a good chunk of us). Being new to the group, I do
respect your concern and courtesy by asking first. Gee, what
a concept for internet! I look forward to your future posts.

72, Paul NA5N

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: myers@bigboy73.West.Sun.COM (Dana Myers)
Subject: [736] Re: DDS VFO with AD7008
Message-ID: <199609302002.NAA12572@sunspot.West.Sun.COM>

> From kd1jv@juno.com Mon Sep 30 11:42:42 1996

> All you hardcore home-brewers out there might be interested in a project
> I have available. It's a AD 7008 based digital VFO. Tunes DC to 23 Mhz
> in 1 Hz(min) steps, is rotary tuned, LCD display, 20 eeprom memories,
> RIT, (and XIT for split band operation) memo memory, programmable LO
> offset for making direct reading receivers. Can also be calibrated if

^^

> you have accurate freq counter available. Everything you need for freq
^^

Don't overlook the value of using WWV for this. Simply set the VFO to the highest WWV frequency you can receive, and adjust the VFO timebase for zero beat. This requires that you can get a reasonable beat note between the VFO and WWV, I usually have no problem using leakage from the VFO located adjacent to my receiver. The beauty of this approach is that your receiver need not be anything fancy, since the actual accuracy is determined by the beat note and not the receiver.

> control of a QRP transceiver. It's built on a 4" L, 2.5" W 3/4" D
> board, encoder mounts off board. Spurs? -50 dBc min wide band, -60, -70
> typical narrow band.

-50dBc wideband means this VFO really must not be used as the primary VFO in a transmitter without some serious filtering, and it also means the VFO will probably compromise the dynamic range of all but the worst receivers.

Have you thought about putting together a clean-up loop PLL for this project? This would address the noise problem quite well without compromising the DDS advantages (though care would be required to make sure the loop filter isn't too slow - perhaps an adaptive filter controlled by PLL lock would be necessary)

Dana KK6JQ
Dana@Source.Net

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: kd1jv@juno.com (STEVEN WEBER)
Subject: [759] Re: DDS VFO with AD7008
Message-ID: <19960909.133011.5471.7.KD1JV@juno.com>

> > Spurs? -50 dBc min wide band, -60, -70 typical narrow band.

>-50dBc wideband means this VFO really must not be used as the primary
>VFO in a transmitter without some serious filtering, and it also means
>the VFO will probably compromise the dynamic range of all but the worst
>receivers.

Dana's got a good point here.

Before you go too crazy, better point out some of the down sides to DDS. In the past, the only thing we had to worry about is harmonics. With a DDS system, unwanted spurs can be created anywhere. Some of these spurs are heterodynes of the fundamental freq being generated by the DDS chip and the reference clock. Therefore there is a spur that tunes 50 Mhz to 25 Mhz as the DDS tunes 0 Mhz to 25 Mhz. There is also one that tunes 50 to 75 Mhz, ect.

The low order spur (50 to 25 Mhz) has a hefty amplitude and is why I limit the output to 23 Mhz. Even at 23, the spur at 27 Mhz leaks through the low pass a little. Be careful of this.

In some cases you can actually pick off these heterodyne spurs and put them to good use!

These spurs aren't too much to worry about since the lowpass filter on the DDS output effectively gets rid of them. The spurs we really need to worry about occur in the pass band of the filter.

These spurs are created by "glitch" energy in the DAC making the output signal, each time the latches change state. Which is quite often. Generally speaking the higher the base freq, the greater in number and greater in amplitude these spurs will be. A DDS running at 3 Mhz will be a lot cleaner than when the freq is set to 23 Mhz.

Because of these spurious signals, I DO NOT recommend directly amplifying the DDS signal to levels above 5 watts. Even at this QRP level, putting a band pass filter, the narrower the better, between the DDS output and the amplifier is a very good idea.

Builders of high end gear and operating at QRO levels need to research this carefully. The PLL clean up loop is a good idea. As with all things in life, there are trade offs to be considered

For the average QRPer, using the DDS VFO directly shouldn't cause any serious problems, just keep the issue of spurs in mind. As DDS become more common, we might have to change the way we think, and use band pass filters on the output of our rigs rather than just low pass.

73, de KD1JV

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "Jeff M. Gold" <JMG@tntech.edu>
Subject: [738] Re:First kit recommendations
Message-ID: <01IA3H66UE5U8WWU11@tntech.edu>

Hi,

think I have built most of the kits out there. I certainly would NOT recommend the NN1G as a first kit. The older ones sometimes had problems getting the oscillators running and mine was not that great an experience.

Depending on the band you want I would certainly recommend the Wilderness Norcal 40A. I have built one of every version they have come out with.. each has built great and worked great. I have had to sell off much of my equipment, but kept my Wilderness 40a. I find that if 40 is not in terrible condition, I can work about anyone I hear. The kit was high quality, all on one board and operates fantastically, when you are done you have a quality radio. The rig is very small and runs a very long time on a small gel cell. I use mine about every day. Another good choice that I would recommed would be the Oak Hills single band.. they are also top quality, complete kit, great instructions and are quality equipmnet when you are done.

72

Jeff, AC4HF

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [722] Re: FOX: Schedule [long]
Message-ID: <199609301558.PAA28816@chuck.dallas.sgi.com>

Bob White has pointed out a typo to me. The first fox, AB50U Tim in NM is really going to be on two hours.

So please change times to 0100-0300UTC.

Thanks Bob,

..
: Chuck Adams (K5FO CP-60) 49/49/50 adams@sgi.com
: EMPS QS0s=0 STATES(w/c)=0/0 DX=0

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [708] RE: High Angle Radiators
Message-ID: <Pine.SOL.3.94.960930065830.1847B-100000@utkux4.utcc.utk.edu>

One of the best antennas for satellite reception by pointing it straight up is the Moxon rectangle. It has a free space cardoidal pattern that translates in upward orientation to nearly full coverage across the sky in all directions with the gain of a 2-element beam. Details in a past issue of Communications Quarterly.

-73-

LB, W4RNL

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
Subject: [739] Re: HV Safety
Message-ID: <199609302227.RAA24929@multi2.pic.net>

Please, PLEASE, please do not do this! It violates electrical code. It makes all the other electrical devices in the house potential death traps. Ground fault interrupters are designed to detect this violation of a circuit and shut off the power quick, and they have saved lives. If you somehow forget to ground the chassis FIRST, or it comes loose, or it is substantially different than the house ground bond, you could get killed. Even if your ground connection is perfect, the other electrical devices in the house could kill you or your family. Please use a transformer rated for at least 1500 volt isolation and please install circuit protection (a fuse) in case the transformer breaks down. It is also a good idea to run off a GFI. Yes it is possible to design a safe transformerless AC supply, but NOT THIS WAY.

Michael A. Gipe, P.E. K1MG

mgipe@reliablemeters.com

> From: William K Hibbert <wb2vuo@juno.com>
> To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
> Subject: HV Safety
> Date: Friday, September 27, 1996 9:50 PM
>
> Seeing that most of the subscribers to the list are not running tube gear
> of any sort, and with the interest in the 50C5 Xmtr in the last week, I
> felt that this posting is appropriate.
>
> It IS possible to run a transformerless HV supply safely. The method you
> need requires a GOOD, SAFE ground connection to the chassis, and a SINGLE
> WIRE connection to the AC line. In addition, your house wiring MUST be
> up to code. What you do is to connect the chassis to ground FIRST.
> Then, the "high" side of the P.S. is connected to a well-insulated
> single conductor, and connected to one prong on a 2-conductor AC plug
> (old-style). Plus this in, and turn on the power. If the tube lights
> up, you are all set. If the tube doesn't, then reverse the plug.
>

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Jeffrey Herman <jherman@hawaii.edu>
Subject: [745] Re: HV Safety
Message-ID: <Pine.GS0.3.93.960930151112.7102D-100000@uhunix5>

> From: William K Hibbert <wb2vuo@juno.com>
>
> Seeing that most of the subscribers to the list are not running tube gear
> of any sort, and with the interest in the 50C5 Xmtr in the last week, I
> felt that this posting is appropriate.
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> It IS possible to run a transformerless HV supply safely. The method you
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> up to code. What you do is to connect the chassis to ground FIRST.
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> single conductor, and connected to one prong on a 2-conductor AC plug
> (old-style). Plus this in, and turn on the power. If the tube lights
> up, you are all set. If the tube doesn't, then reverse the plug.
>

Ah, I recall seeing a similar xmtr in one of the ham-projects books
in our library (mid 60s edition). Except the tube was a 117__

(117v filament). A single wire went to the wall socket; the NE2 lamp glowed if the plug was oriented correctly - if not the key was HOT.

If I can get the publisher's permission, we'll scan those old 1, 2, and 3 tube xmtr circuits into the archives on the Glowbugs list.

Yes, do use care - suggest one uses an isolation xformer (Newark has 120v to 120v xfirms).

7.3W from Hawaii,
Jeff KH2PZ / KH6

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: n5zgt@swcp.com (Brian Mileschosky)
Subject: [760] Re: JOTA - Jamboree on the Air
Message-ID: <199610010342.VAA18073@kitsune.swcp.com>

At 09:11 PM 9/30/96 -0600, Douglas L. Datwyler wrote:
>Is anyone doing air time during Jamboree-on-the-Air? Oct 19, 1996 0000
>to 2359 local.

>

>Doug WR70

>

Hi Doug,

My Explorer Post will be on the air from Camp Frank Rand in Northern New Mexico near the village of Chimayo. I am the Post President and the Post is sponsored by the Albuquerque Amateur Radio Club.

I might be up there...depends on if I have any tests (ACTs, etc) that weekend. If I do go up, I'll be bringing my QRP gear for 20 and 40 meters to show off how small this stuff can be (Great for backpacking!), but I might go ahead and hook an antenna to it all.

There will be a Fall Camporee up there, so a lot of Troops will be up there, and we will be busy!

Not sure on the call, but I can find out if you want me to. We might use my call if I go.

If anybody is not familiar with JOTA, please e-mail me! I'll fill you in. I suggest anybody who knows a Scout/Scouter, offer to let some boys/girls use your equipment to talk around the world to to other Scouts/Scouters during JOTA, which takes place once a year on the 3rd weekend of October. If you don't know a Scout/Scouter, ask around so some boys/girls can join the fun! Complete details and a very informative packet 'o' stuff can be attained from the ARRL free of charge.

I hope to hear a lot of people on! We'll be QRO, but I might hook up the QRP stuff and head down to 14.060 or 7.040 sometime if I get the chance!

72,
Brian, N5ZGT

Boy Scouts of America	Amateur Radio - N5ZGT
Eagle Scout - 1996	ARRL QRP: NorCal# 1700 QRP-L# 580
JASM - Troop 41	Author of Worldradio's "Youth Forum" Column
Albuquerque, N.M.	Packet: N5ZGT @ KC5IZT.ALBQ.NM.USA.NA
O.A. Lodge 66 <-W-W-W-<<	Internet: n5zgt@swcp.com

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: BOB KELLOGG <ae4ic@nr.infi.net>
Subject: [730] Re: Mod to Sierra for 80m novice end
Message-ID: <199609301848.0AA06183@mh004.infi.net>

Hi Paul,
At 11:01 PM 9/29/96 -0400, you wrote:

>Thought I would report a simple mod to get the Sierra up to the novice end of
>80m. For me it was necessity being the mother of invention as usual. The
>vfo can be lowered about 50 Hz by adding about 9 to 12 pf across the
>variable cap. I used one of those match head caps.

Thanks for a great tip!! Elegant in it's simplicity.

CUL,
Bob Kellogg, AE4IC
Probably, but not nececelery. - Benny Hill

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "Thomas J. Whalen" <whalen@swcp.com>
Subject: [748] Re: OHR Web Page E-mail Address
Message-ID: <Pine.SUN.3.91.960930193032.5520B-100000@kitsune.swcp.com>

On Mon, 30 Sep 1996, Dick Witzke wrote:

> Gang,
> The e-mail address <qrp@ohr.com> on our web page is now working correctly.
> You may use either <ohrqrp@netonecom.net> or <qrp@ohr.com> to contact us.
>

> 73,
> Dick
> OHR
>
>

Hi Dick, I viewed your home page today and was quite impressed with the products you offer. Looking at the wattmeter and the filter. Christmas is coming soon!!! Tom WB5QYT

From owner-qrp-l@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Mike Czuhajewski <wa8mcq@u1.abs.net>
Subject: [709] Re r.r.a.qrp on netnews
Message-ID: <Pine.BSI.3.93.960930080827.23317A-100000@u1.abs.net>

Why no rec.radio.amateur.QRP? Here's a little historical perspective. This topic hasn't come up for over a year and a half, probably because most people are quite satisfied with the way things are now. It wasn't always that way. Back then we were hosted by netcom.com. The software they were running did NOT support the daily digest, and I think that was a very significant factor in the call for the newsgroup at that time, perhaps the major factor.

A lot of people were complaining that they could not handle the daily traffic load on qrp-l, and it was substantially less than it is today. Without a daily digest, ones mailbox would have from 10 to 30 or so new messages daily (much more nowadays) in addition to everything else there. That's a lot of clutter, with lots of potential for important, work related messages to be overlooked, and it makes non-work-related usage much more visible. (Let's face it, many people on qrp-l do it via accounts at work which are supposed to be for work purposes only, and they can be monitored for noncompliance. Government and military people have the same problem.)

I think we had the daily digest function while hosted by think.com before that, though I didn't use it at the time. The loss of the digest when we moved to netcom.com was a substantial blow. (Why did we move? Thinking Machines, Inc went into Chapter 11 bankruptcy proceedings, and it didn't seem like a very good idea to stick with them and pray that they worked things out!)

The advantage of the daily digest is that you get a single (albeit huge) e-mail message once a day, instead of several dozen, greatly reducing the clutter (but not the byte count). You can download it and read it later off-line at your convenience (and not on company time :-)) , and best of all it has an index at the top. You can

scan the list of topics and only read those that look interesting, which speeds things up considerably.

I did an informal survey on qrp-l then, though I never posted the results publicly. Of close to 100 people who responded, it was something like 60% for staying as a mail reflector and 40% for going to a newsgroup. I later realized I was excluding a very significant group of people. It was common in those days to see public unsubscribe messages, with people saying in so many words that they enjoyed qrp-l but simply could not handle the large flow of messages (remember, no more daily digest). I went over to rec.radio.amateur.homebrew and one other--r.r.a.misc?--and asked former subscribers to qrp-l which they preferred. Interesting results; with those people factored in, it was almost a perfect 50/50 split. I also got responses from three people who told me they were never subscribers; they were interested in the concept of qrp-l but deliberately avoided it specifically because there was no daily digest currently available and did not want the increased message flow in their mailboxes. Our reputation preceded us :-)

Another frequent comment for those wanting to stay as a mail reflector was that they did not have access to USENET feeds and would not be able to participate if we went that way. With the changes that have taken place in the Internet service provider world since then that may be less of a factor, though there are still probably a lot of people who have e-mail capability but no USENET access.

As someone pointed out yesterday, other very good reasons for staying off USENET are MAKE MONEY FAST, HOT LIVE XXX SEX WEB SITE and similar crud that appears on newsgroups. Easy access to anyone with a keyboard is the culprit, and Jim Eshleman recently made a slight change to qrp-l administration which makes it a private list--only subscribers can post to it. That will not totally eliminate that type of crud since that type of person can easily subscribe and post those messages, but it would be easy to weed them out and turn them into nonsubscribers. And since there are soooooo many newsgroups out there, few will go to the trouble of subscribing to private mail reflectors so they can reach just a few more people with their spam.

Heckling is another good reason for not becoming a newsgroup. As a few people pointed out during the last round of discussions (1994), we would inevitably be opening ourselves up to numerous posts along the lines of "Life's too #@#\$ short for QRP! [with expletives fully spelled out]", "why don't you @#\$\$% losers get a life AND a \$#@# amplifier?", "hey Beavis, QRP sucks, heh heh heh", etc. An unfortunate fact of life is that not everyone loves QRP and QRPers, and some have an open and vocal hatred. As a mail reflector we have a much lower profile plus the advantage of being able to exclude

nonsubscribers from posting.

We once again have the daily digest function, and people seem quite contented with being a mail reflector again. I forgot to mention above that we suffered a significant defection when we left think.com and lost the digest; I don't have numbers available, but as I seem to recall we lost quite a few people; Chuck should remember. We've grown considerably since then, and our numbers are larger than ever. I don't see where anything is broken, so I won't be the one to try and fix it :-)

73 and Queue Our Pea DE WA8MCQ

wa8mcq@abs.net

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996

From: lhalliday@creo.bc.ca

Subject: [727] Re: Reference Book Sources

Message-ID: <9608308441.AA844105483@mail.creo.bc.ca>

My faves include the ARRL and RSGB Handbooks, as well as W1FB's Design and QRP Notebooks, QRP Classics, Solid State Design for the Radio Amateur, Practical Transmitters for Novices (RSGB) and The Art of Electronics (Horowitz & Hill). Technical Topics Scrapbook (RSGB) is a compilation of G3VA's RadCom column from 1985 to 1989 and is well worth a look. Ditto Amateur Radio Techniques, which appears to be out of print. How about Introduction to Radio Frequency Design (W7ZOI)?

Catalogues can be *very* educational: make sure you have a selection. Digi-Key, Mouser, Kanga, RF Parts, Active, Cirkit, Mainline, Cricklewood, Cyclades, Maplin, etc. etc. etc. Best of all, many of these catalogues are freebies if you ask nicely.

Don't neglect the magazines for up-to-date information. What magazines can *you* just not bear to face the world without?

Laura Halliday VE7LDH
lhalliday@creo.bc.ca
ve7ldh@amsat.org
Locator: CN89mg

"C'est une femme mutine, assez
elegante, grave et legere, ayant le
sens du confort et du plaisir
en tout." - C. Deneuve

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [737] Re: Reference Book Sources
Message-ID: <Pine.SOL.3.94.960930163518.14145E-100000@utkux4.utcc.utk.edu>

On Mon, 30 Sep 1996 lhalliday@creo.bc.ca wrote:

>

> Catalogues can be *very* educational

> Laura Halliday VE7LDH

Amen, Laura.

Read component specifications and instrument specifications with good questions in mind, like "How do these two similar looking things really differ?" "What are these good for?" "What do I get for twice the money, and what do I really need, anyway?" "Will I get what I really need if I get the cheaper stuff?" We learn most from what we read when we have questions and read to find the answers. Catalogs are great sources of answer in electronics. Thanks for the reminder.

-73-

LB, W4RNL

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: Ed Kleckner <ekleck@kendaco.telebyte.net>
Subject: [710] Re: Round nose pliers - Source wanted
Message-ID: <Pine.LNX.3.91.960930050903.30770A-100000@kendaco.telebyte.com>

Stan -- I have a pair that date back many years ago to when I dabbled in jewelry making -- you might check out suppliers for jewelry making in your yellow pages.

72 Ed, N7YQR

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996
From: WD6BOR@aol.com
Subject: [704] Re: Rules
Message-ID: <960930011400_296933550@emout04.mail.aol.com>

In a message dated 96-09-29 20:22:04 EDT, adams@chuck.dallas.sgi.com (chuck

adams) writes:

<<

Please delete section on two points for CA stations. I thought the west coast was on the light side and have decided I made a bad decision. It gives them an unfair advantage, so the change in the rules is to delete all lines giving CA 2 points each.

>>

What?!?!

We don't talk about Texas like that... much.

Darrel "Peacock Feathers" J., WD6BOR

From owner-qrp-1@Lehigh.EDU Mon Sep 30 23:12:22 1996

From: Patrick Taber <ptaber@logiccraft.com>

Subject: [734] Re: SSB power set for QRP

Message-ID: <1.5.4.32.19960930192819.00901c8c@freebird>

At 11:38 AM 9/30/96 -0500, you wrote:

>As a brass pounder, I don't work ssb myself, although my station can. I'd like

>to know how you ssb ops out there set power so that you meet the QRP

>requirement.

>Any info gratefully received.

>72, Bob N6WG

>

I can't answer for everyone, but I use a PEP Wattmeter and set it so my speech peaks meet the criteria when transmitting into a dummy load. I usually use 5W as the peak target, though I think that by the letter of the law 10W is allowed for SSB. If you're into rigor, then you'd need a two-tone generator to set the power level. It's all in what your conscience will allow anyway.

>>>==>PStJTT